What is claimed is:

1. A filter cleaning system for use with a filter having a front and a back, the front defining an open plenum, the filter cleaning system comprising:

(a) a fluid manifold;

(b) a valve arranged in fluid communication with the fluid manifold;

(c) a nozzle configured to receive a primary fluid jet from the fluid manifold by operation of the valve, the nozzle including a diffuser that separates the primary fluid jet into multiple jets;

(d) a blowpipe that provides fluid communication between the nozzle and the valve, the blowpipe being configured to position the nozzle adjacent to the front of the filter and to position the valve adjacent to the back of the filter;

(e) wherein a fluid flow pathway is provided through the valve, the blowpipe, and the nozzle.

2. The filter cleaning system of claim 1, wherein the diffuser of the nozzle is configured to direct the multiple jets into the open plenum in such a pattern as to fill a rectangular volume of the open plenum.

3. The filter cleaning system of claim 1, wherein the blowpipe define a first diameter, and each of the valve and the nozzle are sized and constructed such that the a cross-sectional area defined by the first diameter of the blowpipe further defines a minimum cross-sectional area of the fluid flow pathway of the system.

4. The filter cleaning system of claim 1, wherein the valve includes a valve body defining openings and a fluid passage, the openings being in fluid communication with the manifold, the fluid passage being in fluid communication with the blow pipe.

5. The filter cleaning system of claim 4, wherein the valve body defines an annulus area located between the openings and the fluid passage, the annulus area being at least as large as a cross-sectional area defined by an diameter of the blowpipe.

6. The filter cleaning system of claim 5, wherein the annulus area is no larger than a combined area defined by the openings of the valve body.

7. The filter cleaning system of claim 1, wherein the nozzle includes multiple exhaust tubes each having an inner diameter, and wherein a total cross-sectional area defined by the inner diameters of the multiple exhaust tubes is equal to or greater than an inner diameter of the blowpipe.

8. The filter cleaning system of claim 7, wherein the nozzle defines a primary fluid jet passage, the total cross-sectional area defined by the diameters of the multiple exhaust tubes being equal to at least 95 percent of a largest diameter of the primary fluid jet passage.

9. A nozzle for use with a filter cleaning system, the nozzle comprising:

(a) a nozzle body having a first end and a second end, the first end defining a primary fluid jet passage, the second end defining multiple exhaust tubes; and

(b) a diffuser arrangement located adjacent to the second end of the nozzle body, the diffuser arrangement including a number of wedge constructions.

10. A manifold and valve arrangement for use with a filter cleaning system, the arrangement comprising:

(a) a manifold defining an interior, the manifold including a first outer surface;

(b) a valve mounted to the manifold, the valve including:

(i) a valve body;

(ii) first and second seals, the first seal providing sealing contact between the valve body and the first outer surface of the manifold, the second seal providing sealing contact between the valve body and the interior of the manifold;

(ii) openings formed in the valve body that provide fluid communication between the valve and the manifold, the openings being located within the interior of the manifold when the valve is mounted to the manifold; and

(iii) a diaphragm selectively positionable in open and closed positions to control fluid communication through the valve.

11. A valve, comprising:

(a) a valve body defining a fluid passage;

(b) a mounting flange interconnected to the valve body;

(b) a plurality of openings formed between the mounting flange and the valve body, the openings being in fluid communication with the fluid passage of the valve body; and

(c) a diaphragm selectively positionable in open and closed positions to control fluid communication through the fluid passage of the valve body.

12. The valve of claim 11, wherein the fluid passage has a first diameter located at an end of the fluid passage opposite the openings, a cross-sectional area of the plurality of openings being at least as great as a cross-sectional area defined by the first diameter of the fluid passage.

13. The valve of claim 12, wherein fluid flow enters the plurality of openings in a first flow direction and flows through the fluid passage of the valve body in a second flow direction, the first flow direction being generally opposite the second flow direction.

14. The valve of claim 13, wherein the openings define an expansion region for fluid flow, the expansion region being configured to reduce flow speed to assist in redirecting fluid flow from the first flow direction to the second opposite flow direction.

15. The valve of claim 11, wherein the fluid passage has a first end a adjacent to the openings and a second opposite end, the fluid passage tapering from the first end to the second end.

16. The valve of claim 15, wherein fluid passage defines a tapered diameter at the second end of the fluid passage, the tapered diameter being configured to correspond to an inner diameter of fluid communication pipe when the valve is mounted on the fluid communication pipe.

17. The valve of claim 11, wherein the diaphragm and valve body further define an annulus area located adjacent to the fluid passage, the annulus area being at least as large as a cross-sectional area defined by a minimum diameter of the fluid passage.

18. The valve of claim 17, wherein the annulus area is no larger than a combined area defined by the plurality of openings formed between the mounting flanges and the valve body.

19. A method of servicing a filter cleaning system for a gas turbine air intake system; the gas turbine air intake system including a frame with an apertured tube sheet and a plurality of filter elements mounted adjacent to apertures in the tube sheet; the gas turbine air intake system cleaning gas by drawing gas through an upstream side of the filter elements, through the filter elements, and through apertures in the tube sheet; the tube sheet having an upstream side with exposed upstream sides of the filter elements and a downstream side; the method comprising:

(a) accessing the filter cleaning system from the upstream side of the tubesheet;

(i) the filter cleaning system including a manifold arrangement and pulse valve arrangement; and

(b) servicing the filter cleaning system from a position only on the upstream side of the tubesheet;

(i) the step of servicing including having access to all parts of the pulse valve arrangement.